

# The Work of Selwyn D. Collins

Selwyn D. Collins was a pioneer in the collection and analysis of statistical information on the health status of the general population. He created not only an important body of new statistics about the common human ailments but also new techniques for obtaining such statistics, new terminology for describing them, and new methods for analyzing them.

Almost all of Dr. Collins' working life was devoted to quiet, unostentatious research in his chosen field of interest. In 1920, his first position in the Public Health Service was that of statistician on the staff of Edgar Sydenstricker, one of this country's foremost epidemiologists. Mr. Sydenstricker and Dr. Goldberger had been using interviews to show the statistical association between pellagra and dietary deficiency in the classic South Carolina Mill Villages Study. It was undoubtedly Sydenstricker's use of community interview surveys of the general population that stimulated Dr. Collins' interest in this method.

During this early period Dr. Collins also had close and frequent contact with Dr. Wade Hampton Frost, an outstanding epidemiologist and an associate of Sydenstricker. Dr. Frost influenced the character of many Public Health Service studies, while Dr. Collins improved the techniques for such studies and carried them to new heights of usefulness.

Dr. Collins' contributions to methodology are seen in two comprehensive health surveys of national scope and numerous smaller intensive community surveys. The survey by the Committee on the Costs of Medical Care in 1928-31 and the National Health Survey of 1935-36 were more ambitious than anything of their kind previously undertaken in this country. They were based on cross sections of the population, using methods of sampling that were advanced for their time. The community study in which the health and medical care of a

population is analyzed over a period of time was of particular interest to Dr. Collins, and he played an important part in the designing of such studies as those conducted in Cattaraugus County and Syracuse, N.Y., and the 5-year survey of the Eastern Health District of Baltimore.

It was in his methods of analyzing the complex mass of data obtained in these surveys that Dr. Collins' ability was most evident. The soundness of these methods is indicated by the large number of them that have been adopted for use in later surveys, including the U.S.

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## Public Health Monograph No. 62

**Selwyn D. Collins' Contributions to Health Statistics: A Guide to His Works.** By *Maryland Y. Pennell, Theodore D. Woolsey, Katharine S. Trantham, and Josephine L. Lehmann.* Public Health Monograph No. 62 (PHS Pub. No. 737), 14 pages, U.S. Government Printing Office, Washington, D.C., 1960, 20 cents.

The accompanying text is the introduction to the grouping of Dr. Collins' publications into the 11 categories which form the principal contents of Public Health Monograph No. 62, published concurrently with this issue of *Public Health Reports*. This monograph is the joint work of four persons who served under Dr. Collins in the Division of Public Health Methods and are still in that division of the Public Health Service.

For readers wishing the data in full, copies are on sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. Official agencies and others directly concerned may obtain single sample copies without charge from the Public Inquiries Branch, Office of Information, Public Health Service. Copies will be found also in the libraries of professional schools and the major universities and in selected public libraries.

National Health Survey which began 3 years before Dr. Collins' death. Into the very foundations of this major endeavor to fill permanently the need for comprehensive morbidity statistics has been built much of Dr. Collins' methodological framework.

But Dr. Collins was more than a specialist in illness survey methods. Perhaps his greatest contribution to public health was the series of papers in which he and his co-workers published the statistical results they had compiled. These papers represent source material which will be consulted for decades to come.

The significance of this body of data on general morbidity and medical care utilization is that it marks a turning point in demography. Much of the knowledge available to public health workers on the volume and distribution of illness and injury had previously come from mortality statistics. As medical science advanced, however, death became regarded more and more as the end point of a long complex of illnesses and increasing disability. Mortality statistics no longer gave an adequate description of the health needs of society. Although it will be years before public health statistics on morbidity are as periodic, detailed, and reliable as those on mortality, Dr. Collins'

lifetime of work has brought that attainment nearer.

Of his many achievements in the compilation of illness and medical care data and the development of health study techniques, a few examples follow:

1. Collaboration in developing international uniformity in classifying causes of morbidity and mortality. This resulted in the extensive sixth revision of previous international lists which, in 1948, became the International Statistical Classification of Diseases, Injuries, and Causes of Death.

2. Contribution to the difficult and controversial question of the relationship between economic status and health, and particularly the effect of the depression of the 1930's upon health.

3. Analysis of a long series of influenza epidemics in the United States, demonstrating the changing character of these epidemics and the effect they had on mortality from diseases other than influenza.

4. Origination of methods for the use of school health records to depict statistically the health of children and, in particular, for finding ways of circumventing the shortcomings of these records.

## Foreign Science Literature

The National Science Foundation has designed an exhibit to acquaint U.S. scientists and technologists with current translations from Russian scientific literature and their availability.

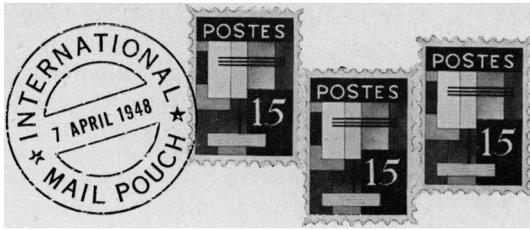
Sample copies selected from some 85 available Russian journals which have been translated cover-to-cover are featured. These journals are representative of leading Soviet publications in the disciplines of agriculture, astronomy, biology, chemistry, earth sciences, engineering and technology, mathematics, medicine, physics, and social sciences.

Handout pamphlets, provided to exhibitors without charge, contain information on translation depository libraries in the United States and bibliographic periodicals which list new

accessions and abstract translations. The pamphlets also list translated Russian journals by discipline, as well as other pertinent information.

A foldup book display, this compact exhibit opens like a suitcase, is completely self-contained, and can be installed quickly and easily. Complete instructions are included.

The exhibit is available on loan to professional and academic groups for 2-week periods, unless otherwise specified. There is no charge. Requesters should include alternative dates, complete shipping address, and anticipated number of viewers. Address all requests and inquiries to the Office of Science Information, National Science Foundation, Washington 25, D.C.



## Progress in the "Outback"

In the Northern Territory of Australia, 15,000 members of once primitive tribes, until recently threatened with extinction, are multiplying on cattle stations, missions, and settlements scattered over the almost roadless half million square miles of the territory. The total population is only 35,000.

To cope with medical emergencies and public health needs for this thinly settled territory, the Commonwealth Department of Health flies physicians, dentists, dietitians, nurses, health inspectors, and aboriginal health assistants to settlements by its aerial ambulance service. Physicians travel the circuit once a month by three different routes, covering the greater part of the Northern Territory. Each circuit takes about 3 days, with stops at three or four places each day, for "sick parade." Patients who need further investigation or treatment are brought to Darwin by the service's plane, commercial aircraft, truck, or mission lugger. Dentists travel the same circuits but at less frequent intervals.

Physicians, dentists, and other health personnel doing survey work also travel by air. They may spend weeks at one settlement, screening all persons, carrying out immunization campaigns, or instructing and advising on sanitation, nutrition, or personal hygiene.

Each mission or settlement has at least one trained nurse to handle daily medical needs and to supervise infant welfare. The nurse is responsible to the visiting physicians for carrying out prescribed treatment. She also radios for assistance in emergencies.

It is planned that each settlement will have an aboriginal assistant. The skill of these young men with a microscope has been an important asset in combating hookworm, leprosy, and tuberculosis.

Leprosy, which once had an estimated incidence

of 5.6 percent, is now decreasing although the infection persists in remote and inaccessible areas. Yaws and granuloma have decreased considerably. Malaria is confined to small areas, in a mild vivax form.

Trachoma is severe in the dry inland areas of the Northern Territory. An ophthalmologist is now organizing treatment and prevention. Tuberculosis is not so prevalent as it is among some native communities, and an organized campaign of chest X-rays and treatment is being carried out. Pertussis and measles have been prevented by inoculation. With improvement of diet, potbellied and rachitic children are no longer a common sight. The infant mortality rate is decreasing.

In their tribal state, Australia's aborigines were remarkably free of the communicable diseases common in the tropics. Intertribal barriers, which were in effect isolation practices, protected them. Each tribe, never larger than 300 persons, lived self-contained within its own lands and even at yearly corroborees with other tribes, preserved its own separate camp. Within the tribal lands, these people were seminomadic. They lived by the spear and moved from one water hole to another when game became scarce. Their high protein, low carbohydrate diet (mostly meat with various roots, berries, and yams) was a little deficient in calcium and vitamin C by modern standards, but they showed no evidence of deficiency.

As the tribesmen took jobs at cattle stations as stockmen, and in towns, missions, and government settlements, they came into contact with infectious agents. Also, once they exhausted the local supply of game, they had little to eat but carbohydrates. Frank kwashiorkor was rare, but lesser degrees were usual among children. Pertussis and measles took a heavy toll. Fecal customs, unimportant in a seminomadic life, led to epidemics of dysentery in the camps, and hookworm and other worm infestations became prevalent.

—*Excerpted and adapted from A. H. Humphry, M.B., B.S., D.T.M.&H., chief medical officer, Office of the High Commissioner for Australia, "The Australian Aborigine and the Flying Public Health Doctor." Journal of the Royal Institute of Public Health and Hygiene, 22: 291-294, December 1959.*

# Signs

and

# Symptoms

Extremely hot weather is associated with a higher death rate than very cold weather, according to data from 1949 through 1958. Paul H. Kutschenreuter, U.S. Weather Bureau meteorologist, reported these findings at a meeting of the District of Columbia section of the American Society of Heating, Ventilating, and Air Conditioning Engineers.

The increase in deaths during a frigid spell is relatively small compared with what happens during a heat wave, he said. Hot weather deaths are sometimes triple the normal number for the season. The elderly are the hardest hit; the death rates of persons aged from 1 year through 24 years seem unaffected by either heat waves or cold spells.

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Americans under 20 years of age will number 90 million, 40 percent of the population, by 1970. Those over 65 years of age then will number about 21 million, more than 10 percent.

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A "disaster city" is being opened in Pasadena, Calif., for use as an emergency civil defense or alternate local government headquarters. The main building contains a large auditorium, office space, classrooms, a modern kitchen, and nurses' quarters. An estimated 10,000 refugees could be housed in tents on the grounds and fed from the kitchen facilities.

A "disaster street" is under construction to be used as a training area for civil defense personnel and for testing rescue, monitoring, and first-aid conditions.

The installation will serve also as a full-time police academy and will be available to the public for selected civic projects.

Safety information for baby sitters is being encouraged through local campaigns by the Florida State Board of Health in cooperation with the National Safety Council. Local health officers and other interested persons are receiving a packet containing a planning guide which suggests community courses in safety for baby sitters, leaflets for parents, and the basic informational needs of sitters.

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The mortality rate of mothers in Minnesota is approaching what might be considered an irreducible minimum, according to Dr. J. L. McKelvey, head of the department of obstetrics and gynecology of the University of Minnesota Hospitals, reporting on the Minnesota Maternity Mortality Study conducted since 1941 by a special subcommittee of the Minnesota State Medical Association. Minnesota's 1957 rate for obstetric deaths was 0.24 per 1,000 births, only slightly higher than the 0.2 per 1,000 usually considered to be the rational lower limit of maternal deaths.

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The U.S. Air Force is pursuing a medical survey of personnel exposed to microwaves to determine possible harmful effects. There has been evidence that microwaves form cataracts.

For some time, the suspected harmful effects were ascribed exclusively to "overheating" of tissues. But new data from several research centers strongly hint at more subtle and as yet little-understood non-thermal effects.

When influenced by microwaves, protozoa that normally move in a seemingly helter-skelter fashion suddenly march in orderly procession, Dr. John H. Heller of the New Eng-

land Institute of Medical Research reports. He emphasizes that effects on living cells are tied directly to the electromagnetic field, with very little leeway. Amebas, he states, which merely shift their line of march with changing exposures in the range of a few microseconds, may be "literally ripped to shreds" by fields lasting half again as long.

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The role of public health workers in accident prevention has been set forth by the Mississippi State Board of Health in an 11-page mimeographed pamphlet available upon request.

Full integration of accident prevention techniques into every existing health program of a local department is advocated. And emphasis is given to the need for encouraging community support and participation.

State and local health officers, public health nurses, sanitation personnel, health educators, nutritionists, communicable disease investigators, and clerks are given tips on ways to underscore good safety practices in the community while performing their duties.

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A joint liaison committee of epidemiologists and laboratory directors has been named by the Conference of State Epidemiologists and the Association of State Public Health Laboratory Directors. Dr. Elmer L. Shaffer of New Jersey has been appointed as chairman for 1960. The chairmanship will alternate each year between a laboratory director and an epidemiologist.

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Beginning in 1961, an estimated 200,000 Pennsylvania drivers who were licensed prior to 1924 will be required to submit a certificate from a physician and a State police examiner testifying that they meet minimum physical standards. And beginning in 1962, all drivers will be required to supply proof of a satisfactory physical re-examination every 10 years up to the age of 60, and every 5 years thereafter.

# Federal Publications

**Indians on Federal Reservations in the United States. A digest. Albuquerque Area.** *PHS Publication No. 615, pt. 4; 1960; 34 pages.*

Selected information is presented on Indian groups in Colorado and New Mexico and portions of Arizona and Utah. The population groups, their homes, education, and income sources, and their health status and services are discussed. Included also are brief descriptions of the location, ownership, and topography of reservation land.

**Health Statistics From the U.S. National Health Survey.**

**Chronic respiratory conditions reported in interviews, United States, July 1957–June 1958.** *PHS Publication No. 584-B12; 1959; 32 pages; 30 cents.*

For four diagnostic categories—asthma and hay fever, chronic bronchitis, chronic sinusitis, and other chronic respiratory conditions exclusive of tuberculosis—detailed tables give numbers and rates for the condition, medical attention status, and associated restricted activity and bed disability days.

Findings of previous surveys and estimates made by researchers in the health field are cited to provide a background for these first data on chronic respiratory conditions from the National Health Survey's household interview. To the extent that they are available, results of medical record and examination studies of these diseases are also presented; and they show how differing concepts of morbidity affect the magnitude of prevalence estimates.

**Heart conditions and high blood pressure reported in interviews, United States, July 1957–June 1958.** *PHS Publication No. 584-B13; 1960; 36 pages; 30 cents.*

Data on heart conditions and high blood pressure as reported in household interviews are presented in 14 detailed tables and 9 charts showing these chronic conditions by age, sex,

medical attention, and the associated days of restricted activity and bed disability.

The text includes a discussion of the differences in prevalence estimates obtained through different survey techniques.

**Dental care. Interval and frequency of visits, United States, July 1957–June 1959.** *PHS Publication No. 584-B14; 1960; 42 pages; 35 cents.*

This report amplifies previously published National Health Survey data on dental care.

It presents 14 detailed tables on the interval since last dental visit by age, according to sex, urban-rural residence, region of the country, race, family income, and education. A second group of 14 tables relates the same variables to frequency of dental visits.

**Dental care. Volume of visits, United States, July 1957–June 1959.** *PHS Publication No. 584-B15; 1960; 45 pages; 35 cents.*

Amplifying National Health Survey data presented earlier, this report contains nine tables showing volume of dental visits by urban-rural residence, region of the country, race, sex, and age, and by family income, education, and age.

In another 14 tables, the same variables are related to type of dental service—fillings, extractions, cleaning or examination, straightening, gum treatment, and denture work.

This report also carries population tables.

**Veterans. Health and medical care, United States, July 1957–June 1958.** *PHS Publication No. 584-C2; 1960; 52 pages; 40 cents.*

A major section is devoted to selected health characteristics of veterans and nonveterans and the extent to which these two groups use the services of physicians and hospitals. It includes 12 detailed tables and a number of charts.

This is followed by a section on

veterans classified in three war groups: the Korean conflict, World War II, and World War I combined with the Spanish-American War. Thirteen detailed tables are presented.

**A study of special purpose medical-history techniques.** *PHS Publication No. 584-D1; 1960; 27 pages; 30 cents.*

A methodological study preliminary to the development of a medical-history questionnaire and appropriate interviewing techniques for use in a health examination survey of adults is described under seven broad headings: the research problem, the developmental interviews, reliability of responses, comparison of interviews taken by nurses and nonmedical trained interviewers, effectiveness of the open interview, and effectiveness of the self-administered and the closed-interview procedures.

The research was conducted by the survey research center of the University of Michigan under contract with the U.S. National Health Survey. Charles F. Cannell, Ph.D., and Morris Axelrod, Ph.D., of the Institute for Social Research, directed the project and were responsible for the analysis and the report.

*Appendices in these publications give technical notes on methods, sampling errors, definitions of terms, and the questionnaire used in the household interviewing.*

**International Classification of Diseases Adapted for Indexing of Hospital Records and Operation Classification.** *PHS Publication No. 719; 1959; 264 pages; \$1.*

Based on experience in a number of hospitals, finer subdivisions have been made in the International Classification of Diseases to promote a more efficient classification system for indexing diagnostic information on hospital records. The system is designed to permit location of the maximum number of records with the review of the least number. Also included is a classification of operations for indexing surgical cases.

The adaptation is an outgrowth of a collaborative study conducted by

the American Hospital Association and co-sponsored by the American Association of Medical Record Librarians. This is related to a study of efficiency in hospital indexing using the International Statistical Classification and the Standard Nomenclature of Diseases.

Although it is suitable for preparing statistical tabulations from hospital records, the adaptation does not serve as a medical nomenclature. (No free sample copies are available on this publication.)

**National Institute of Mental Health.** *PHS Publication No. 20; revised 1960; 30 pages; 15 cents.*

The organization and function of the National Institute of Mental Health, focal point for the Federal Government's efforts in the field of mental health and mental illness, are described. This booklet covers the institute's research, training, community services, and other activities in considerable detail.

It contains sections on research investigations conducted by the National Institute of Mental Health, research grants, training grants, State and local mental health programs, mental health project grants, program development, and public education. A four-page section of references is provided.

**Mongolism. Hope through research.** *PHS Publication No. 720 (Health Information Series No. 94); 1960; folder; 5 cents, \$3 per 100.*

Research by French and British scientists on the cause and prevention of mongolism and the program at the Public Health Service's National Institutes of Health are described in this folder.

According to the most recent theory reported in the pamphlet, mongolism may be triggered before pregnancy. In 1959 French investigators found in mongoloids studied, 47 chromosomes instead of the standard human 46. Chromosomes are the microscopic life threads within each cell which determine inherited characteristics, such as eye color and height.

To some researchers this new finding suggests that mongolism could

begin with an irregularity in the human egg before it is fertilized. They believe the discovery of the extra chromosome is a significant advance in the total search for the reason for mongolism.

The booklet mentions statistics showing that mongoloid children are born more frequently to older mothers than to younger women. About 1 mongoloid per 1,000 births is born to mothers under 30 years old. The rate rises with increasing age of mothers, to reach 2 to 3 per 100 births in women over 45 years old.

**Housing and Health.** *PHS Publication No. 718 (Public Health Bibliography Series No. 29); 1959; 27 pages; 15 cents.*

Intended for individuals working in and interested in the housing-health field, this publication is a compact, but comprehensive, collection of brief abstracts of 53 reports and studies made over the past 20 years.

It is designed to stimulate further interest in the housing-health field as well as strengthen the relationship of these fields. The information in the abstracts is sufficiently detailed for the reader to determine whether he wants to consult the original paper.

**Are You Related to a Diabetic?** *PHS Publication No. 726; 1960; 4 pages; 5 cents.*

This leaflet is designed for use by State and local health departments, voluntary organizations, and community groups in promoting case-finding activities among relatives of diabetic patients.

It briefly describes diabetes as a disease and the groups among the population most likely to be affected. The importance of early detection and treatment in preventing complications and reducing disability from diabetes is stressed.

**Accident Prevention. A handbook for public health nurses.** *PHS Publication No. 670; 1959; 55 pages; 25 cents.*

Accidents as a public health problem are described in relation to the philosophy of safety, their epi-

demology, and the human factors involved. Special attention is given to accidental poisonings and poison control centers, burns due to fires, carbon monoxide poisoning, lead poisoning in children, motor vehicle safety, childhood accidents, and those of the aging.

The role of the public health nurse in homes, schools, conferences and clinics, and civic groups is discussed, and 14 specific actions which will enhance her work in accident prevention are given.

Tables and charts of accidental deaths and injuries are presented by age groups and types of accidents. The booklet also contains a list of national agencies active in accident prevention and listings of films, books, pamphlets, and articles related to accident prevention.

**National Water Quality Network. Statistical summary of selected data, October 1, 1957-September 30, 1958.** *PHS Publication No. 663, supplement 1; 1959; 164 pages; \$1.*

A Federal, State, and local cooperative report on water quality determinations at selected locations throughout the United States, this supplement to the complete compilation of the data deals with selected segments of the information on radioactivity, organic chemicals, and plankton in surface waters.

While no interpretations are made, it is hoped that this publication will stimulate, among those concerned with water quality, the application of these data to current and future problems in water quality management.

**An Industrial Waste Guide to the Cane Sugar Industry.** *PHS Publication No. 691; 1959; 19 pages; 25 cents.*

The sixth of a series of industrial waste guides, this booklet summarizes available information on the nature, types, and amounts of wastes produced by the cane sugar industry. It also reviews methods that have been developed and used to overcome or minimize the harmful effects of waste effluents.

This guide was prepared in cooperation with the National Tech-

nical Task Committee on Industrial Wastes. It is intended primarily to assist the operators and managers of sugarcane processing plants to use, reduce, and otherwise suitably dispose of their waste waters. It is also designed to inform personnel of regulatory agencies of the sources and pollutional characteristics of sugarcane wastes and the status of developments in waste treatment.

**Septic Tank Care.** *PHS Publication No. 73 (Health Information Series No. 96); revised 1960; folder; 5 cents, \$2.50 per 100.* Written in nontechnical language for the individual homeowner. Discusses proper care and maintenance of septic tank sewage disposal systems and describes their functions and factors affecting them. Gives advice on how to avoid trouble and expense by inspecting the septic tank at regular intervals and determining when cleaning is needed. Encourages householder to provide himself with a diagram of his septic tank system. Back of pamphlet designed so that diagram and record of inspections can be kept there.

**Enterobacteriaceae. Biochemical methods for group differentiation.** *PHS Publication No. 734; 1960; by W. H. Ewing; 30 pages; 20 cents.*

This handbook was designed to be a practical guide for use by any laboratory, whether large or small, that does enteric bacteriological work. In it the author brings together, probably for the first time under a single cover, all of the tests found valuable in the classification of enteric bacteria.

Details to guide performance of each of the tests include materials and equipment required, procedures to follow, and interpretation of test results.

**Selected Articles on Nursing Homes.** *PHS Publication No. 732; 1960; 282 pages; \$1.50.*

Reprints of 47 articles and speeches deal with current problems facing nursing homes. The articles cover such subjects as nursing and related medical services, food services,

administrative management, and standards relating to the improvement of patient care in nursing homes. An appendix contains a directory of licensure agencies responsible for licensing nursing homes in the several States and list of selected special references.

This anthology was prepared to answer a growing need for reference material dealing with nursing homes.

**Protect Your Family Through Immunization.** *PHS Publication No. 697; 1959; folder; 5 cents, \$2 per 100.*

An immunization schedule for DPT (diphtheria, pertussis, and tetanus), poliomyelitis, smallpox, and boosters for all these, including individual tetanus boosters, is contained in this leaflet. The schedule is divided into three sections: first year of life, one year to entering school, and after age six.

Developed as a joint project of the American Academy of General Practice and the Public Health Service, this folder is intended to be given to patients by private physicians or health departments to provide a permanent immunization record for all members of the family.

**Tuberculosis Chart Series, 1960 Edition.** *PHS Publication No. 639; 1960; 28 pages; 25 cents.*

Nine charts and accompanying tables deal with the size and characteristics of the tuberculosis problem in the United States.

The introductory section discusses some of the highlights of the data. This edition focuses attention on the geographic variation of tuberculosis, mostly by States but with special attention to large cities.

**Index Medicus (formerly Current List of Medical Literature).** *Vol. 1, No. 1; January 1960; 274 pages; single copies \$2.25, \$20 per year (\$25 foreign).*

A monthly index to the world periodical literature of medicine, the new *Index Medicus* supersedes both the *Current List of Medical Literature* of the National Library of

Medicine and the *Quarterly Cumulative Index Medicus* which was published by the American Medical Association.

The initial issue contains a list of 71 subheadings, an abbreviation listing of the indexed journals, subject and author sections, and a list of recent United States publications. Information on the loan policy, instructions to borrowers, and a statement on outstanding coupons for photographic services are inside the front cover.

Free sample copies are not available. All communications regarding subscriptions should be addressed to the Superintendent of Documents.

**What Consumers Should Know About Food Additives.** *FDA Leaflet No. 10; 1959; 12 pages; 15 cents.*

This booklet answers the many questions the public is asking the Food and Drug Administration about the Food Additives Amendment to the Federal Food, Drug, and Cosmetic Act. It tells the story of how food additives came to be developed, why and how they are used in food production, why public health safeguards are necessary, and how the new law works. It also gives factual information about the functions of many of the more important classes of food additives, and explains how the law controls two special classes of additives, pesticides and coal-tar colors.

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This section carries announcements of new publications prepared by the Public Health Service and of selected publications prepared with Federal support.

Unless otherwise indicated, publications for which prices are quoted are for sale by the Superintendent of Documents, U.S. Government Printing Office, Washington 25, D.C. Orders should be accompanied by cash, check, or money order and should fully identify the publication. Public Health price quotations, as well as single sample copies of those for which prices are shown, can be obtained without charge from the Public Inquiries Branch, Office of Information, Public Health Service, Washington 25, D.C.

The Public Health Service does not supply publications other than its own.

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